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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,523	03/19/2001	Masao Minobe	Q65488	6184

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EXAMINER

NGUYEN, THONG Q

ART UNIT PAPER NUMBER

2872

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/810,523

Applicant(s)

MINOBE ET AL.

Examiner

Thong Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2003 and 11 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 18-31, 34, 35, 38 and 39 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32, 33, 36 and 37 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-13 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 07 May 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 11, 2003 has been entered.

Response to Amendment

2. The present Office action is made in response to the amendment (Paper No. 16) filed on 5/7/2003.

Election/Restrictions

3. The pending claims 1-39 as originally filed were subjected to a restriction requirement. See Paper No. 7 of 5/17/2002. In response to the restriction, applicant elected the species (a). See Paper No. 10 of 6/21/02. The claims 1-17, 32-33 and 36-37 of the elected species were examined as set forth in the Office actions (Paper No. 11 of 8/22/02; Paper No. 14 of 2/11/03 and Paper No. 17 of 5/16/03).

Since applicant has refiled the application under the rule of 37 CFR 1.114, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-31, 34-35 and 38-39 have been withdrawn from consideration as being directed to a non-elected species.

Drawings

4. The corrected drawings were received on 5/7/2003. These drawings are approved by the Examiner.

Specification

5. The lengthy specification which is amended by the amendment has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenberg (U.S. Patent No. 5,684,626).

Greenberg discloses a microscope having an illuminating system. The device as described in columns 3-5 and 7-12 and shown in figs. 2 for example, comprises an illuminating system for providing light which is converged onto a point in space, a stage for supporting a sample located in front of the converged point, and an objective system for receiving light passing through the converged point. Regarding to the feature relating to the illuminating system, it is noted that the use of an illuminating system having a single light source is disclosed by Greenberg as can be seen in columns 8-9 and figs.12-13.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg in view of Shimada et al (U.S. Patent No. 6,043,475, of record).

The microscope having an illuminating system as provided by Greenberg does not disclose the movement of the objective lens for focusing with respect to the diffractive image plane and the sample. However, the movement of an objective lens and the movement of a condenser lens with respect to an object to be illuminated and/or imaged as well as the diffracting image plane in a microscope is known to one skilled in the art as can be seen in the microscope provided by Shimada et al. See column 15 and fig. 14, for example. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the microscope provided by Greenberg by adjusting the position of the objective lens with respect to the sample for the purpose of adjusting the focus.

10. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg in view of Ellis (of record).

The microscope having an illuminating system as provided by Greenberg discloses the use of polarization elements in the illuminating light path as well as in the observed light path; however, Greenberg does not clearly teach the rotation of the polarization elements and the sample to be illuminated. However, the rotation of polarization elements and the sample in a microscope for

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changing the illumination pattern and/or the observation pattern is clearly suggested to one skilled in the art as can be seen in the system provided by Ellis. See columns 6-7. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the microscope provided by Greenberg by rotating the polarization elements and/or the sample as suggested by Ellis for the purpose of varying the illumination and/or observation patterns.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg in view of Ellis as applied to claim 7 above, and further in view of Shimada et al.

The combined product as provided by Greenberg and Ellis does not disclose the movement of the objective lens for focusing with respect to the diffractive image plane and the sample. However, the movement of an objective lens and the movement of a condenser lens with respect to an object to be illuminated and/or imaged as well as the diffracting image plane in a microscope is known to one skilled in the art as can be seen in the microscope provided by Shimada et al. See column 15 and fig. 14, for example. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the microscope provided by Greenberg and Ellis by adjusting the position of the objective lens with respect to the sample for the purpose of adjusting the focus.

Allowable Subject Matter

12. Claims 3-5 and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if each of claims 3 and 14 is rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 32-33 and 36-37 are allowed over the cited art.

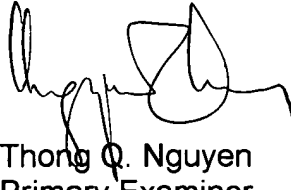
Conclusion

14. The additional references are cited as of interest in that each discloses a microscope having an illuminating system for providing light converged in a space separately from a stage supporting a sample and an objective lens.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (703) 308-4814. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (703) 305-0024. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.



Thong Q. Nguyen
Primary Examiner
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